Europäisches Patentamt

European Patent Office

Office européen des brevets



(11) EP 0 962 929 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 12.01.2000 Bulletin 2000/02

(51) Int. Cl.⁷: **G11B 20/10**

(43) Date of publication A2:08.12.1999 Bulletin 1999/49

(21) Application number: 99110695.6

(22) Date of filing: 02.06.1999

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

MC NL PT SE

Designated Extension-States:

AL LT LV MK RO SI

(30) Priority: 03.06.1998 JP 15429698

(71) Applicant: Matsushita Electric Industrial Co., Ltd. Kadoma-shi, Osaka 571-8501 (JP) (72) Inventors:

 Tagawa, Kenji Katano-shi, Osaka (JP)

Minami, Masataka
 Tsuna-gun, Hyogo-ken (JP)

Kozuka, Masayuki
 Neyagawa-shi, Osaka (JP)

(74) Representative:
Kügele, Bernhard et al
NOVAPAT INTERNATIONAL SA,
9, Rue du Valais
1202 Genève (CH)

- (54) Recording medium, recording apparatus and reproduction apparatus for selecting reproduction order of only specific digital data
- (57) The recording medium of this invention is recorded with a plurality of digital data and a plurality of reproduction path information defining a reproduction order of the plurality of digital data, wherein the plurality of reproduction path information includes first reproduction path information defining a reproduction order of all of the plurality of digital data recorded on the recording medium and second reproduction path information defining a reproduction order of at least one of the plurality of digital data recorded on the recording medium.

EP 0 962 929 A3



EUROPEAN SEARCH REPORT

Application Number EP 99 11 0695

		ERED TO BE RELEVAN	Relevant	CLASSIFICATION OF THE
Category	of relevant pass		to claim	APPLICATION (Int.CL6)
x .	LTD) 6 August 1997 * abstract * * column 1, line 18 * column 13, line 4 *	- column 6, line 33 2 - column 14, line 4 - column 23, line	* 37	G11B20/10
X	CO) 16 October 1996 * abstract * * column 2, line 10 * column 13, line 1 * column 13, line 5 column 18, line 3 * column 23, line 1 * column 25, line 4	- column 5, line 22 8 - line 34 * 3 - line 59 * - line 20 * 7 - line 26 * 9 - line 58 * - column 36, line 4	*	TECHNICAL FIELDS SEARCHED (Ins.Cl.6)
X	EP 0 689 206 Å (SON 27 December 1995 (1 * abstract * * page 3, line 3 - * page 4, line 39 -	995-12-27) page 4, line 6 *	1,4,8,10	
1	The present search report has I	peen drawn up for all claims		
	Place of search	Date of completion of the seat	<u>~</u>	Examiner
	THE HAGUE	12 November 1	999 Bar	el-Faucheux, C
X : parti Y . parti docu A tech	ATEGORY OF CITED DOCUMENTS icutarly relevant if taken alone icutarly relevant if combined with anothered to the same category notogical background—written desclosure	T: theory or p E earther pate after the fill ther D document L: document	nnciple underlying the tent document, but public	nvention shed on, or

EPO FORM 1503 03 82 (Po



EUROPEAN SEARCH REPORT

Application Number EP 99 11 0695

Category	Citation of document with it of relevant pass	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X		YO SHIBAURA ELECTRIC	1	
A	* abstract * * column 1, line 31 * column 12, line 1 * * column 14, line 4 * column 16, line 1 * column 16, line 5 * column 18, line 5	- column 5, line 31 * 0 - column 14, line 28 6 - line 51 * 8 - line 29 * 4 - column 17, line 2 * 9 - column 19, line 13	4,8,10	
	* column 20, line 3 * column 22, line 3 * * column 28, line 1 * figures 1,6,12,14	1 - column 23, line 12 3 - line 25 *		
X A	US 5 642 346 A (MIM 24 June 1997 (1997- * abstract * * column 1, line 13 * column 3, line 43 * column 5, line 59 * column 8, line 9 * column 14, line 3 * figures 1,15-19,3	06-24) - line 21 * - line 65 * - line 54 * - column 6, line 18 * - line 40 * 6 - line 52 *	1	TECHNICAL FIELDS SEARCHED (Int.CI.6)
X A		CORP ;KAWAMURA MAKOTO ISHI (JP); HAAN WIEBE) 997-02-20)	4,8,10	
X A	US 5 721 724 A (MIM 24 February 1998 (1 * the whole documen		1 4,8,10	
	The present search report has	-/ been drawn up for all claims		
· · · · · · · · · · · · · · · · · · ·	Place of search	Date of completion of the search		Examinor
	THE HAGUE	12 November 1999	Ran	el-Faucheux, C
X part Y:part docu A:tech O non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anoument of the same category indicated background —written disclosure impediate document	T theory or principle E: earlier patent do: after the fiting dat ther D document cade a L document cade fit	e underlying the rounderlying the rounderly but public to the application or other reasons.	nvention shed on, or



EUROPEAN SEARCH REPORT

Application Number EP 99 11 0695

Category	Citation of document with indic of relevant passage		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.8)
X	EP 0 685 845 A (TOSHI SHIBAURA ELECTRIC CO 6 December 1995 (1995	(JP)) -12-06)	1	
A	* the whole document	*	4,8,10	
4	WO 96 38837 A (VOQUET; VOQUETTE NETWORKS IN 5 December 1996 (1996 * the whole document	IC (US)) -12-05)	2,3,5-7, 9,11	
				TECHNICAL FIELDS SEARCHED (Int.CI.6)
				·
		•		
 :	The present search report has bee	Date of completion of the sea	reh	Examples
	THE HAGUE	12 November 1	· 1	1-Faucheux, C
X · parti Y ; parti docu	ATEGORY OF CITED DOCUMENTS cularly relevent M taken alone cularly relevant M to combined with another ment of the same category hological background	E earlier pat after the fil D : document	orinciple underlying the in- ent document, but publishing date cried in the application, cried for other reasons	ned on, or



Application Number

EP 99 11 0695

CLAIMS INCURRING FEES
The present European patent application comprised at the time of filing more than ten claims.
Only part of the claims have been paid within the prescribed time fimit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.
LACK OF UNITY OF INVENTION
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
see sheet B
All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
-
· · · · · · · · · · · · · · · · · · ·



LACK OF UNITY OF INVENTION SHEET B

Application Number

EP 99 11 0695

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claim: 1 4 8 10

Recording medium, recording apparatus, reproduction apparatus and program storage medium: a plurality of path information defining a reproduction order of at least one of the plurality of digital data is recorded on the medium with the plurality of digital data. The reproduction order can be selected by the user via an editor.

2. Claims: 2 3 5-7 9 11

Recording medium, recording apparatus, reproduction apparatus and program storage medium: path information defining a reproduction order of a plurality of digital data is recorded on the medium with one plurality of digital data, and at least one of the plurality of digital data to reproduce according to path information has not been recorded on the recording medium, that is why the reproduction path info includes flag info indicating whether or not each of the plurality of digital data has been recorded on the recording medium. When flag info indicates that digital data has not been recorded on the recording medium, a controller controls obtaining digital data from outside the recording apparatus in accordance with the address info. The reproduction order can be selected by the user via an editor.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 0695

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-11-1999

	Patent documen ed in search rep		Publication date		Patent family member(s)	Publication date
 EP	0788094	Α_	06-08-1997	CN	1164916 A	12-11-19
			20 00 200.	EP	0915470 A	12-05-19
	•		•	MO	9707504 A	27-02-19
				JP	11066813 A	09~03-19
				JP		
	,			US	2813245 B 5907658 A	22-10-19 25-05-19
	0727000		16 18 1806			
EF	0737980	Α	16-10-1996	AT	184727 T	15-10-19
				CA	2173929 A	15-10-199
				CN	1150293 A	21-05-19
				DE	69604221 D	21-10-19
				JP	2875231 B	31-03-199
				JP	10050034 A	20-02-199
				JP	8339665 A	24-12-199
EP	0689206	Α	27-12-1995	บร	5687160 A	11-11-199
				CN	1119896 A	03-04-199
				WO	9516262 A	15-06-199
ΕP	0724264	Α	31-07-1996	AT	174149 T	15-12-199
				CA	2168327 A	31-07-199
				CN	1134583 A	30-10-199
				· DE	69601039 D	14-01-199
			•	DE	69601039 T	24-06-199
				EP	0872839 A	21-10-199
				JP	2747268 B	06-05-199
				JP	8273304 A	18-10-199
				JР	2857126 B	10-02-199
				JΡ	10074379 A	17-03-199
				JÞ	2875237 B	31-03-199
				JP	10074380 A	17-03-199
				US	5870523 A	09-02-199
บร	5642346	Α	24-06-1997	JP	2677775 B	17-11-199
			2. 00 1557	JP	7334939 A	22-12-199
			•	us	5721724 A	24-02-199
	•			DE	69501679 D	09-04-199
				DE	69501679 T	27-08-199
		•		DE	69501724 D	09-04-199
				DE	69501724 T	27-08-199
				DE	69501724 T	0.9-04-199
	Θ •.			DE	69501726 T	27-08-199
	•	0				
				EP	0685845 A	06-12-199
		i	. * *.	EP	0750304 A	27-12-199
	· ·		· · · · · · · · · · · · · · · · · · ·	EP	0751524 A	02-01-199
	•		+ 19 k	JP	2882601 B	12-04-199
 			Official Journal of the Europ			

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 0695

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-11-1999

WD	5642346 - 9706531	A	20-02-1997	JP JP JP JP JP JP US US	10064246 A 2944570 B 10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	06-03-1998 06-09-1999 17-03-1998 22-10-1997 13-12-1999 31-03-1999 17-01-1997
WD	-	A	20.02.1007	JP JP JP JP US	10074378 A 2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	17-03-1998 22-10-1997 13-12-1996 31-03-1999 17-01-1997
	 9706531	A	20.02.1007	JP JP JP JP US	2665217 B 8329615 A 2877760 B 9017126 A 5636200 A	22-10-1997 13-12-1996 31-03-1999 17-01-1997
	9706531	A	20.02.1007	JP JP JP US	8329615 A 2877760 B 9017126 A 5636200 A	13-12-1996 31-03-1999 17-01-1997
	9706531	A	20.02.1007	JP JP US	2877760 B 9017126 A 5636200 A	31-03-1999 17-01-1997
·	9706531	A	20.02.1007	JP US	9017126 A 5636200 A	17-01-1997
	9706531	 A	20.02.1007	US	5636200 A	
	9706531	A	20 02 1007	US	5636200 A	
	97 06531	A	20 02 1007	US		03-06-199
	9706531	Α	20 02 1007		5831966 A	03-11-199
US			20-02-1997	AU	6630496 A	05-03-1997
US.				BR	9606567 A	30-12-199
US.				CA	2200346 A	20-02-199
US				CN	1213832 A	14-04-1999
US				EP	0784848 A	23-07-199
US				JP	9106631 A	22-04-199
	5721724	A	24-02-1998	JP	2677775 B	17-11-199
				JP	7334939 A	22-12-199
				ÚS	5642346 A	24-06-199
			•	DE	69501679 D	09-04-199
				DE	69501679 T	27-08-199
				DE	69501724 D	09-04-199
				DE	69501724 T	27-08-199
				DE	69501726 D	09-04-199
				DE	69501726 T	27-08-199
				EP	0685845 A	06-12-199
				EP	0750304 A	27-12-199
				EP	0751524 A	02-01-199
				JP	2882601 B	12-04-199
				JP	10064246 A	06-03-199
			•	JP	2944570 B	06-09-199
				JP.	10074378 A	17-03-199
				JP	2665217 B	22-10-199
				JР	8329615 A	13-12-199
			•	JP	2877760 B	31-03-199
	•			JР	9017126 A	17-01-199
	•			บร	5636200 A	03-06-199
				US	5831966 A	03-11-199
EP	0685845	A	06-12-1995	JР	2677775 B	17-11-199
• •				ĴР	7334939 A	22-12-199
· :.				DE	69501679 D	09-04-199
- 0	·		•	DE	69501679 T	27-08-199
•	- 0			DE	69501724 D	09-04-199
		•	€	DE	69501724 T	27-08-199

8

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 0695

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-11-1999

	Patent documen ed in search rep		Publication date		Patent family member(s)	Publication date
FP	0685845	A		DE	69501726 D	09-04-19
-		• •		DE	69501726 T	27-08-19
				ĒΡ	0750304 A	27-12-19
				ĒΡ	0751524 A	02-01-19
				ĴΡ	2882601 B	12-04-19
				ĴΡ	10064246 A	06-03-19
		-		JP	2944570 B	06-09-19
				JP	10074378 A	17-03-19
				JP	2665217 B	22-10-19
				JP	8329615 A	13-12-19
				JP	2877760 B	31-03-19
				JP	9017126 A	17-01-19
				US	5636200 A	03-06-19
				US	5831966 A	03-11-19
						24-06-19
				US	5642346 A	24-00-19
				US 	5721724 A 	
WO	9638837	A	05-12-1996	AU EP	6977896 A 0871955 A	18-12-19 21-10-19
	ŕ					